OIPE
AUG 18 2004
PATENT & TRADEMARK OFFICE
JC102

FIG. 1 (PRIOR ART)

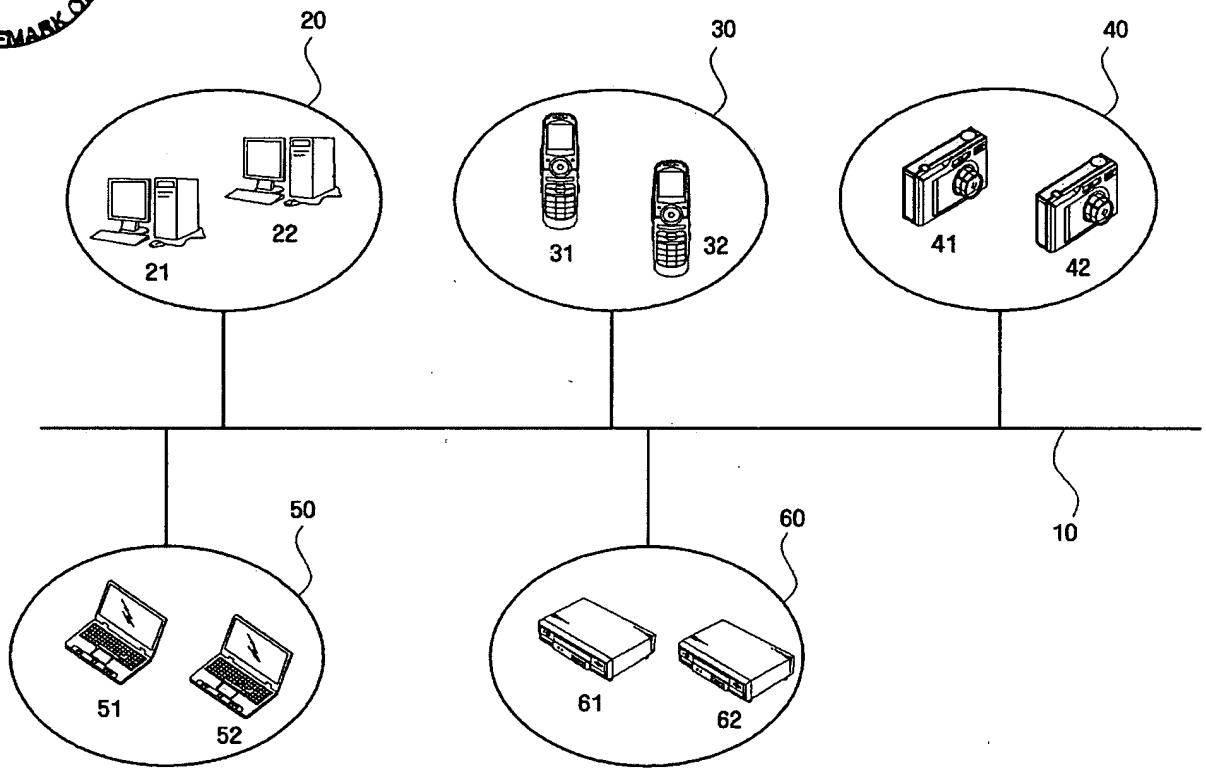


FIG. 2

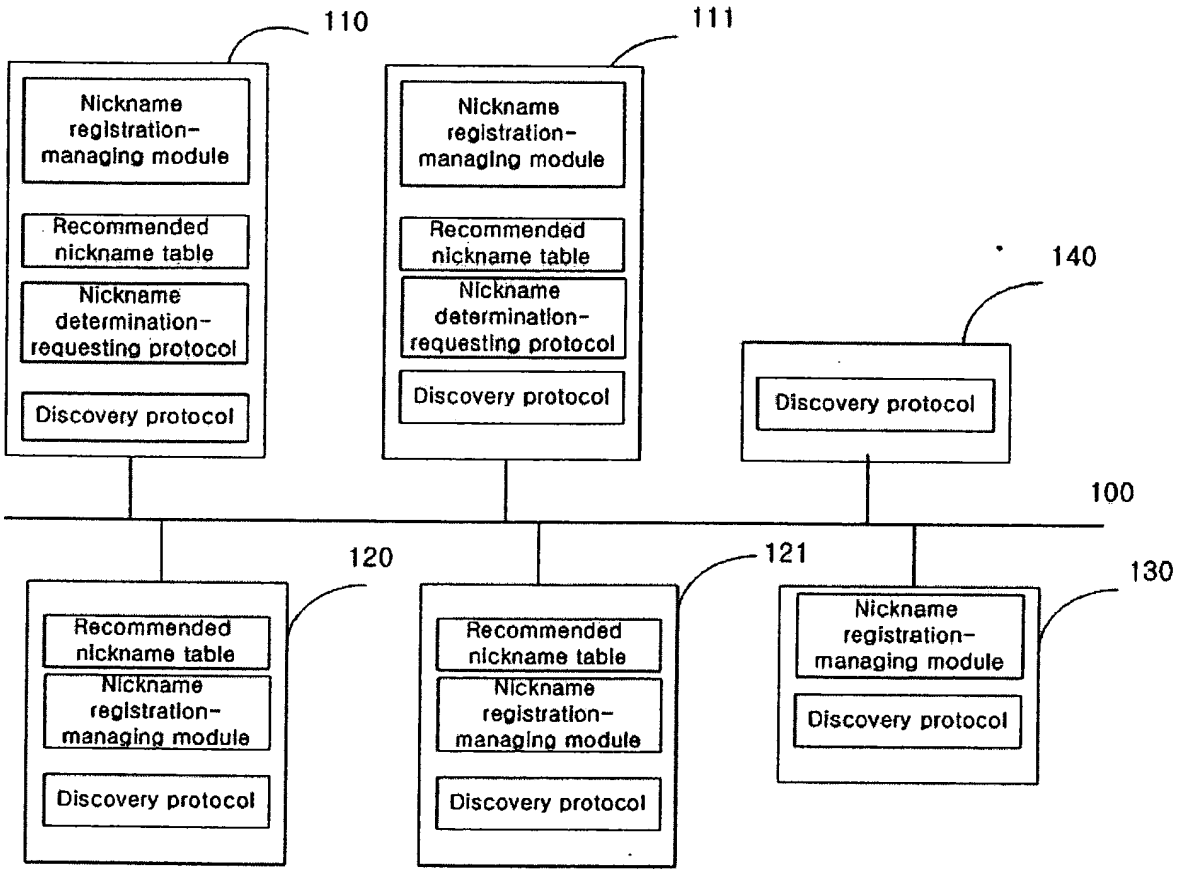

110
Nickname registration-managing module
Recommended nickname table
Nickname determination-requesting protocol
Discovery protocol
111
Nickname registration-managing module
Recommended nickname table
Nickname determination-requesting protocol
Discovery protocol
140
Discovery protocol
100
120
Recommended nickname table
Nickname registration-managing module
Discovery protocol
121
Recommended nickname table
Nickname registration-managing module
Discovery protocol
130
Nickname registration-managing module
Discovery protocol

FIG. 3

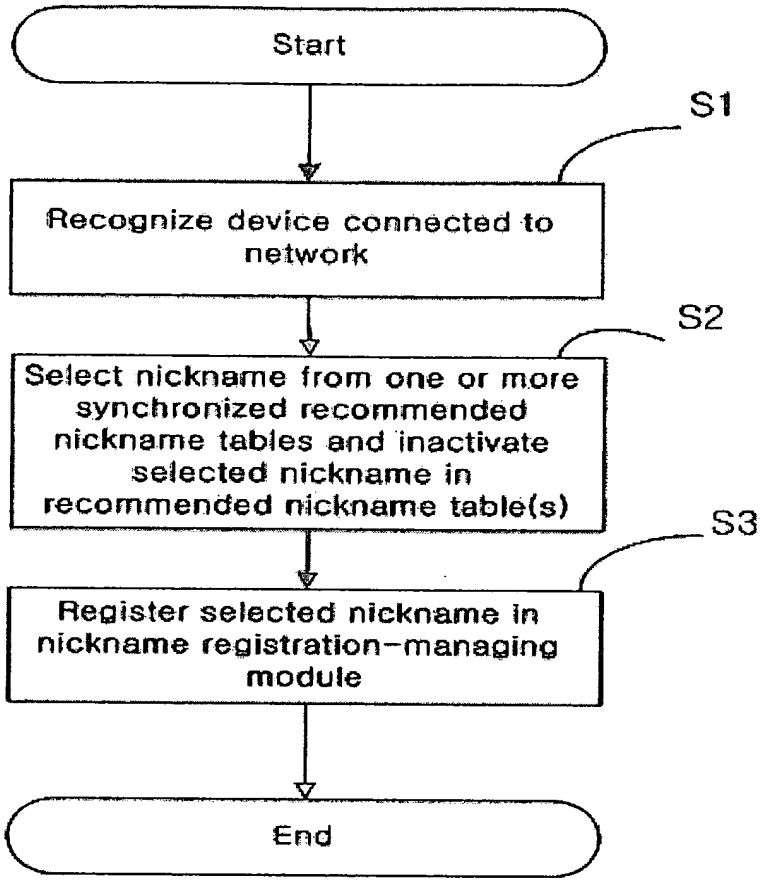

Start
S1
Recognize device connected to network
S2
Select nickname from one or more synchronized recommended nickname tables and inactivate selected nickname in recommended nickname table(s)
S3
Register selected nickname in nickname registration-managing module
End

FIG. 4

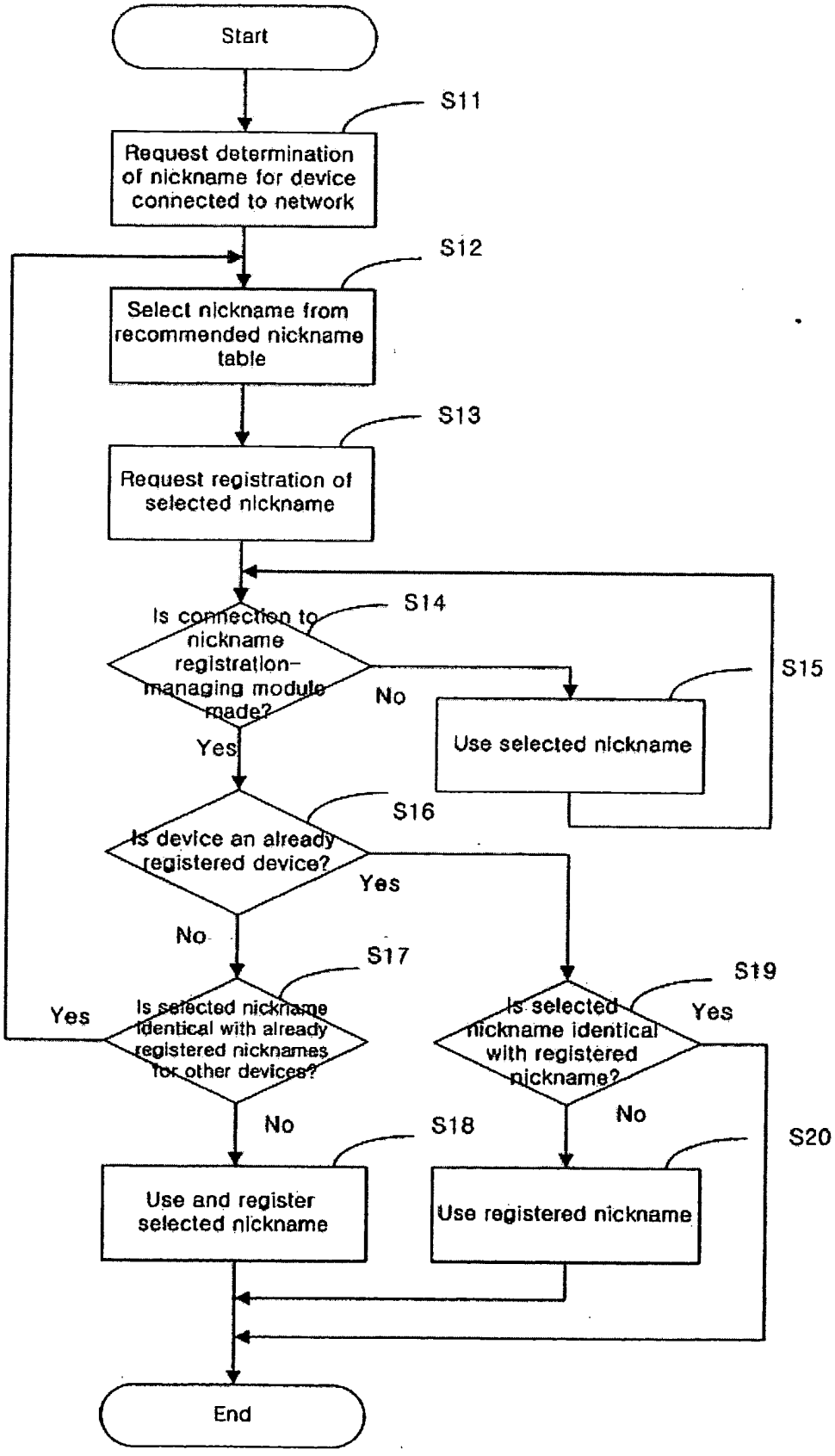

Start
S11
Request determination of nickname for device connected to network
S12
Select nickname from recommended nickname table
S13
Request registration of selected nickname
S14
Is connection to nickname registration-managing module made?
No
S15
Use selected nickname
Yes
S16
Is device an already registered device?
Yes
No
S17
Is selected nickname identical with already registered nicknames for other devices?
Yes
S19
Is selected nickname identical with registered nickname?
Yes
No
S18
Use and register selected nickname
No
S20
Use registered nickname
End

FIG. 5

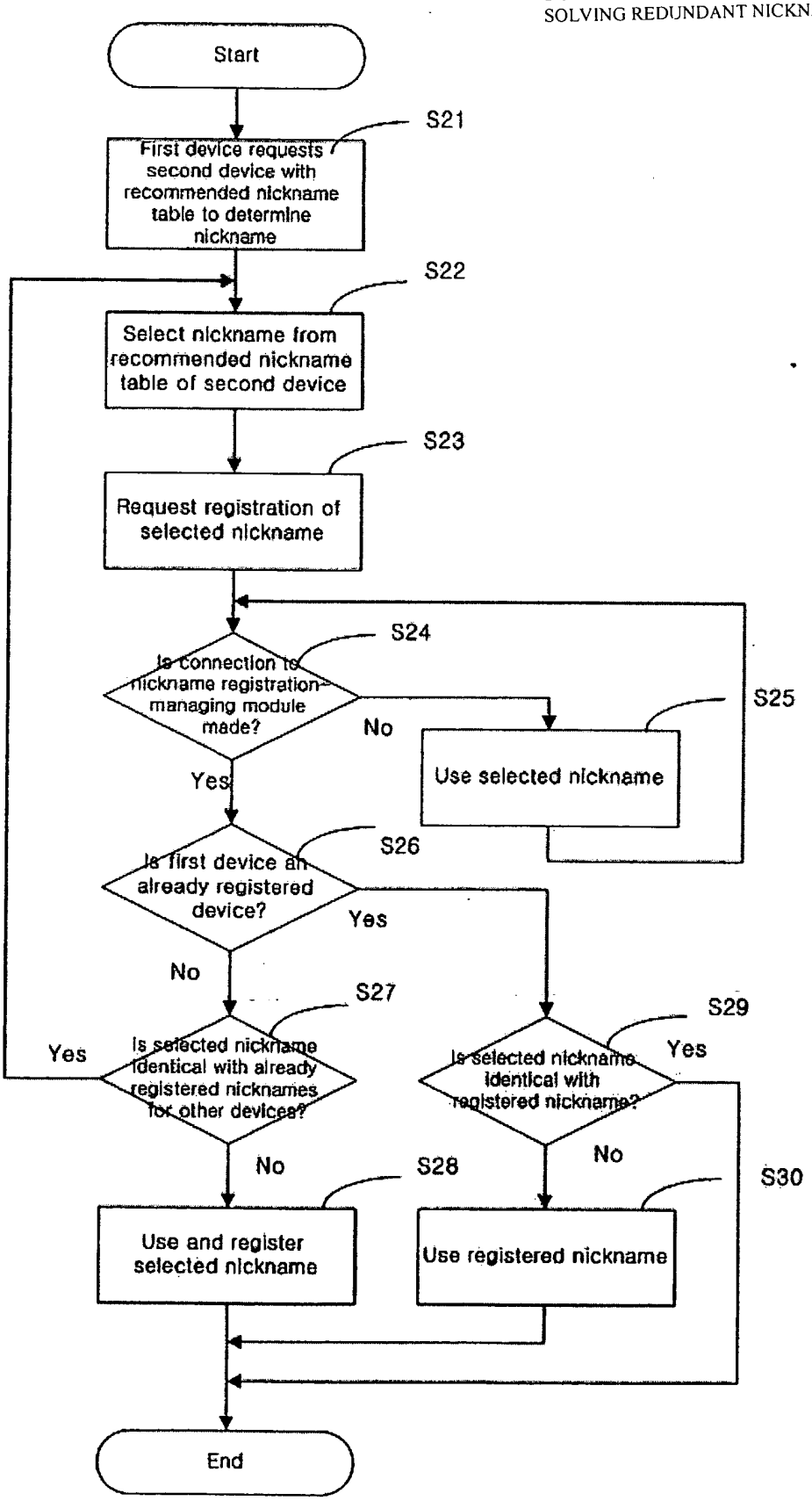

Start
S21
First device requests second device with recommended nickname table to determine nickname
S22
Select nickname from recommended nickname table of second device
S23
Request registration of selected nickname
S24
Is connection to nickname registration managing module made?
No
S25
Use selected nickname
Yes
S26
Is first device an already registered device?
Yes
No
S27
Is selected nickname identical with already registered nicknames for other devices?
Yes
S29
Is selected nickname identical with registered nickname?
Yes
No
No
S28
Use and register selected nickname
Use registered nickname
S30
End

FIG. 6

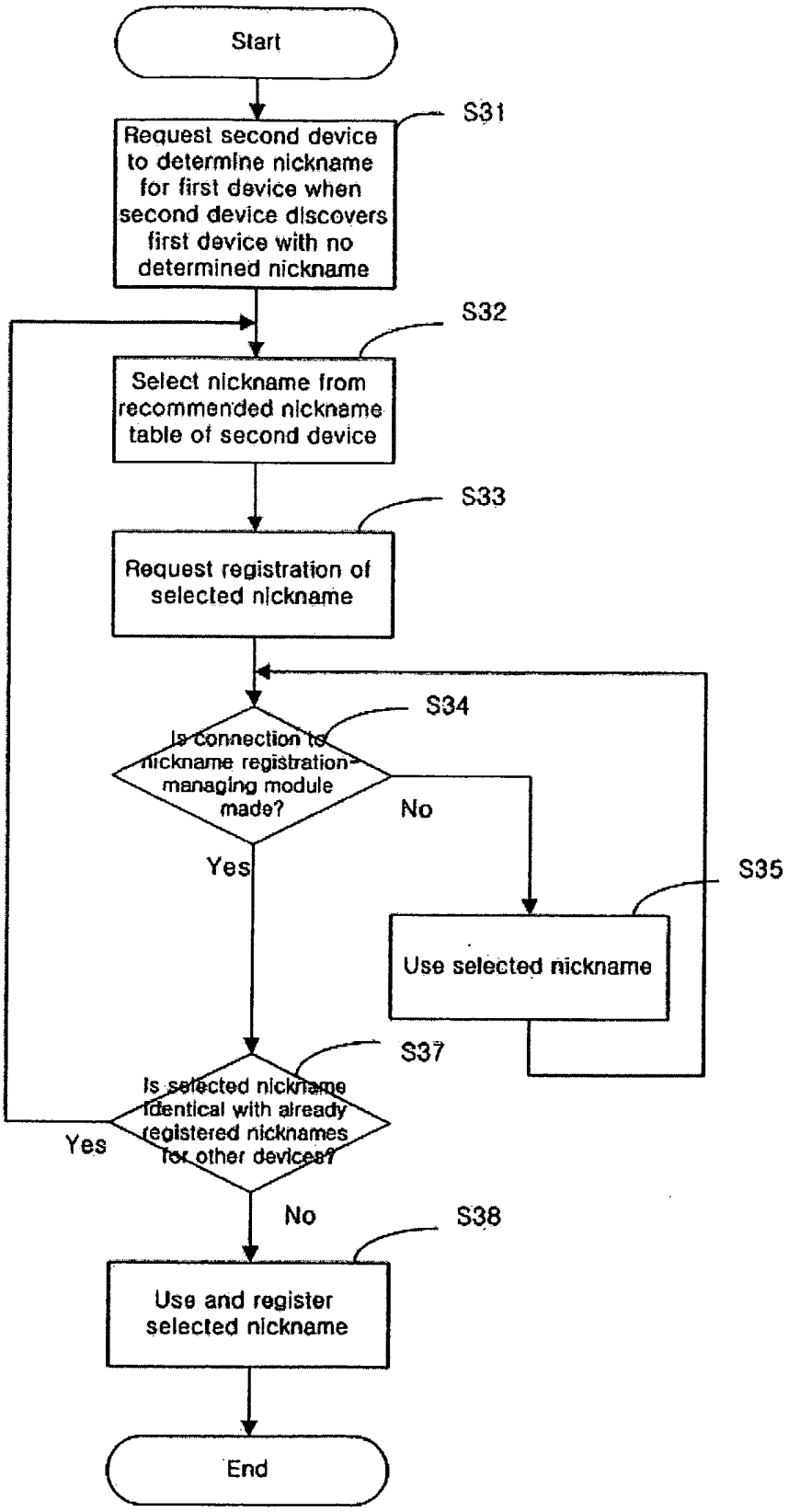

Start
S31
Request second device to determine nickname for first device when second device discovers first device with no determined nickname
S32
Select nickname from recommended nickname table of second device
S33
Request registration of selected nickname
S34
Is connection to nickname registration managing module made?
No
Yes
S35
Use selected nickname
S37
Is selected nickname identical with already registered nicknames for other devices?
Yes
No
S38
Use and register selected nickname
End

FIG. 7

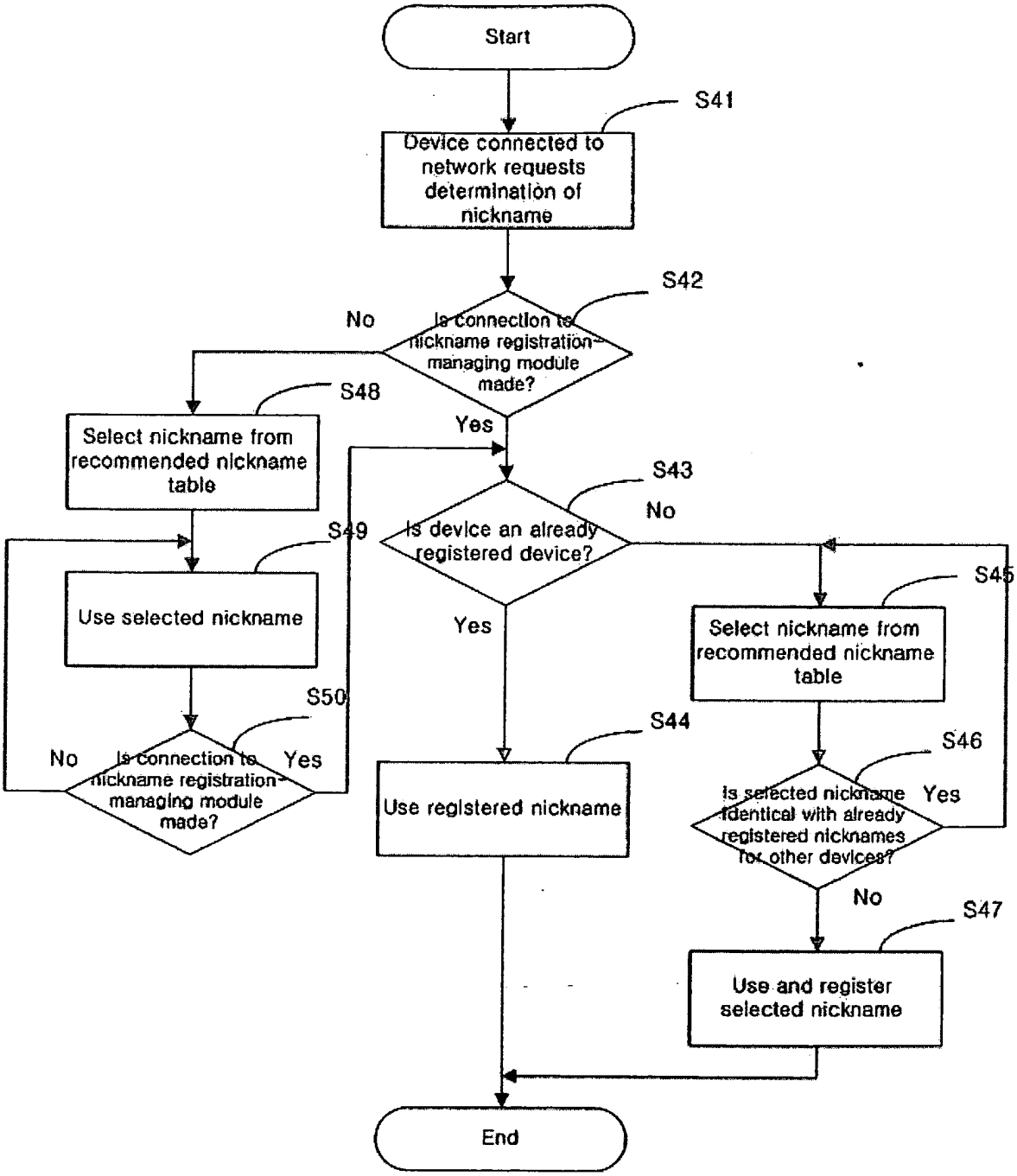
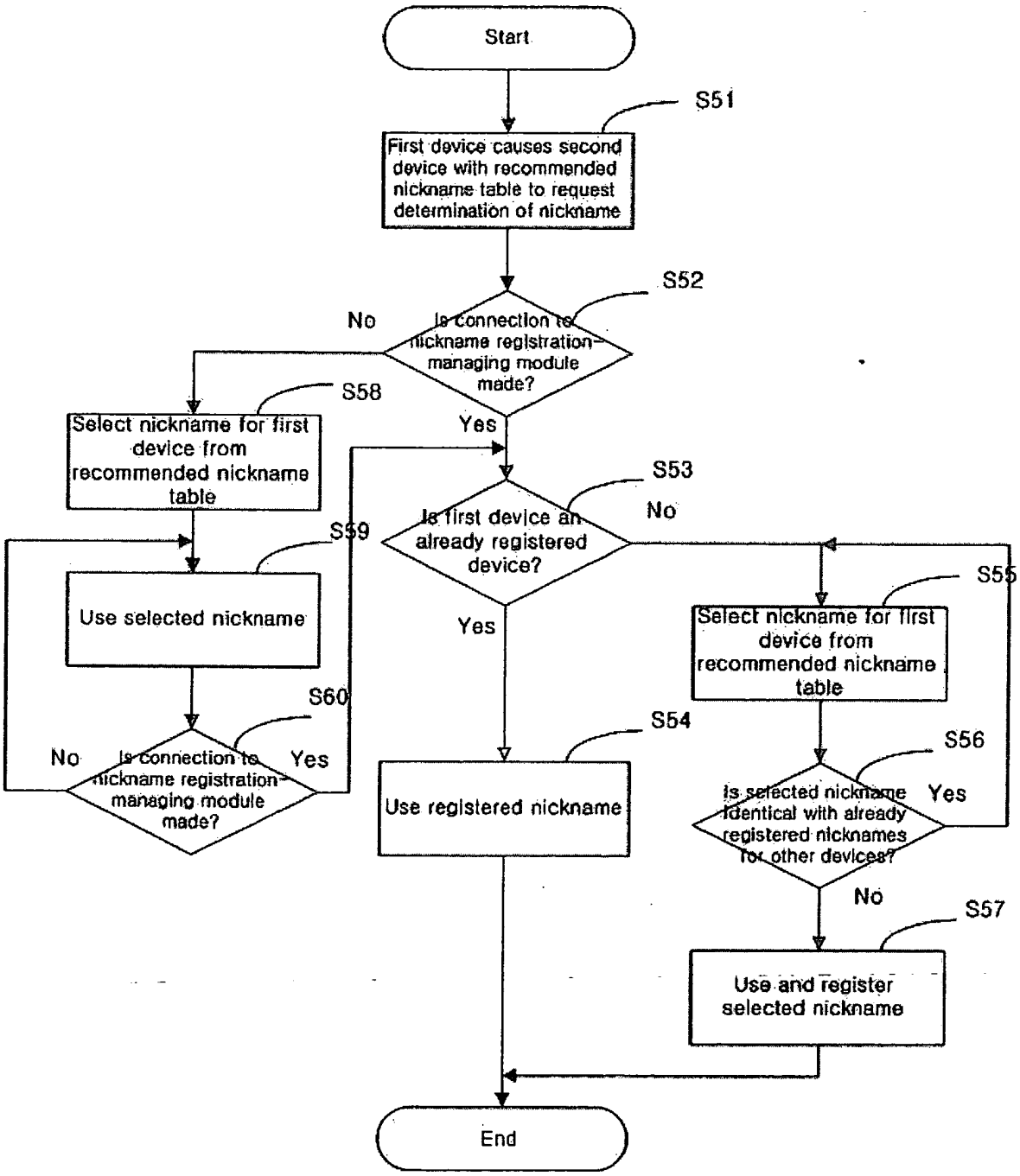

Start
S41
Device connected to network requests determination of nickname
S42
Is connection to nickname registration-managing module made?
No
Yes
S48
Select nickname from recommended nickname table
S43
Is device an already registered device?
No
Yes
S49
Use selected nickname
S50
Is connection to nickname registration-managing module made?
No
Yes
S44
Use registered nickname
S45
Select nickname from recommended nickname table
S46
Is selected nickname identical with already registered nicknames for other devices?
Yes
No
S47
Use and register selected nickname
End

FIG. 8


Start
S51
First device causes second device with recommended nickname table to request determination of nickname
S52
Is connection to nickname registration managing module made?
No
Yes
S58
Select nickname for first device from recommended nickname table
S53
Is first device an already registered device?
No
Yes
S59
Use selected nickname
S60
Is connection to nickname registration managing module made?
No
Yes
S54
Use registered nickname
S55
Select nickname for first device from recommended nickname table
S56
Is selected nickname identical with already registered nicknames for other devices?
Yes
No
S57
Use and register selected nickname
End